

REMARKS

Claim rejections under 35 USC 102

Claims 1-21 have been rejected under 35 USC 102(e) as being anticipated by Cypher (2004/0002992). Claims 1, 9, 15, 16, 17, and 18 are independent claims, from which the remaining claims ultimately depend. Applicant submits that as amended, the independent claims are patentable over Cypher, such that all the claims are patentable over Cypher.

Claim 1 is discussed as representative of the independent claims, insofar as the rejection over Cypher is concerned. Claim 1 has been amended so that it is determined “whether a cache miss relating to a memory unit should be transmitted to *a sub-plurality of nodes lesser in number than the plurality of nodes but greater than one*, based on a criteria.” For example, consider FIG. 9 of the patent application as originally filed. If the test in part 906 is true, then the cache miss is selectively broadcast to a “potential current owner [node] and to [the] home node” of the memory unit in question in part 908. That is, the cache miss is broadcast to two nodes, which is lesser in number than all the nodes, and greater than one node. Likewise, if the test in part 910 is true, then the cache miss is “selectively broadcast to [a] group of nodes,” which is lesser in number than all the nodes, insofar as when the test in part 910 is false, the cache miss is broadcast to “all the nodes.” The cache miss can also be broadcast to just one node, the “current owning node” of the memory unit in question, in part 904.

Therefore, the claimed invention as amended provides for a great degree of granularity in determining to which of the nodes a cache miss should be transmitted. In particular, the claimed invention as amended can selectively broadcast the cache miss to a “sub-plurality of nodes,” lesser in number than all the nodes (i.e., the complete plurality of nodes), but greater than one. It is this new limitation of the claimed invention that Applicant submits Cypher does not teach, disclose, or suggest.

Cypher has less granularity in determining to which of the nodes a cache miss should be sent. In particular, Cypher can transmit a cache miss to *a single node* or can broadcast the cache miss to *all the nodes*. That is, a particular transaction can be “conveyed in broadcast (BC) mode or point-to-point (PTP) mode.” (P. 3, para. [0034]) In point-to-point mode, a cache miss is sent to a single node – i.e., from one “point” to another “point.” (See, for instance, para. [0039] – where if the “address of the read request is designated for PTP mode transmissions, switch 200 is configured to convey a corresponding request only to memory subsystem 144A” – i.e., to just one node.) By comparison, in broadcast mode, a cache miss is sent to *all* the nodes. (See, for instance, para. [0039] – where if the entry “indicates a BC transmission mode, switch 200 may be configured to broadcast a corresponding request to *each client*.”)

Therefore, Cypher does not anticipate the claimed invention as amended. The claimed invention can transmit a cache miss to a group of nodes that contains more than one node, but that does not contain all the nodes. That is, the claimed invention is limited to being able to transmit a cache miss to a *sub-plurality* of the nodes that is greater in number than one, but is lesser in number than *all the plurality* of the nodes. By comparison, Cypher can only transmit a request to *one* node or to *all* the nodes. Insofar as the claimed invention provides for granularity in selecting nodes to which a cache miss is transmitted that is greater than that provided in Cypher, the claimed invention as amended is patentable over Cypher.

Conclusion

Applicants have made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mike Dryja, Applicant's representative, at 425-427-5094, so that such issues may be resolved as expeditiously as possible. For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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